

ABSTRACT

A method for interpreting the current distribution of an object being measured using basis vector components calculated from the measured signals. The components in question have been so selected that they describe the features, as independent as possible, of the current distribution being examined, which enhances the computation and makes it more accurate. This is achieved by converting the measured signals into a more natural form from the standpoint of the current distribution while totally eliminating the signals associated with the external interferences. After the conversion, the source modeling is performed in an optimal manner using the basis vector components of the signal space instead of the actual measurement signals. One substantial feature of the invention is that after the conversion, the source model need not be regularized any more.